

Inspection Report with SI&A Data

Structure Description: 830.05 Foot - 3 Span Steel continuous Stringer/Multi-beam or Girder

2 District: 09 **3 County:** Elliott **16 Latitude:** 38°08'38.00" **7 Longitude:** 83°04'04.00"

7 Facility Carried: KY-7

Milepoint: 12.900

6A Feature Intersected: LITTLE SANDY

9 Location: 1.860 MI. FROM JCT. OF KY

NBI	X
Element	X
Fracture Critical	
Underwater	
Special	

NBI CONDITION RATINGS			
58 Deck:	7	61 Channel:	7
59 Superstructure:	8	62 Culvert:	N
60 Substructure:	8	Sufficiency Rating:	98

GEOMETRIC DATA		
48 Max Length Span:		390.000 ft
49 Structure Length:		830.000 ft
32 Approach Roadway:		44.000 ft
33 Median:		(0) No Median
34 Skew:		0°
35 Flare:		No Flare
50A Curb/Sidewalk Width L:		0.000 ft
50B Curb/Sidewalk Width R:		0.000 ft
47 Horiz. Clearance:		48.000 ft
51 Width Curb to Curb:		48.000 ft
52 Width Out to Out:		51.000 ft

DESIGN	
Substandard:	No
Fracture Critical:	No FC Details
43A Main Span Material:	(4) Steel Continuous
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	3
44A Approach Span Material:	Not Applicable
44B Approach Span Design:	Not Applicable
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(1) Monolithic Concrete
108B Membrane:	(0) None
108C Deck Protection:	(1) Epoxy Coated Reinforcing
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	0.000 in
Overlay Date:	

ADMINISTRATIVE		
27 Year Built:		2004
106 Year Reconstructed:		
42A Type of Service On:		(1) Highway
42B Type of Service Under:		(5) Waterway
37 Historical Significance:		(5) Not Eligible
21 Maintenance Responsibility:		(01) State Hwy Agency
22 Owner:		(01) State Hwy Agency
101 Parallel Structure:		(N) No II Structure Exists

APPRAISAL		
36A Bridge Railings:	(1) Meets Standards	
36B Transitions:	(1) Meets Standards	
36C Approach Guardrail:	(1) Meets Standards	
36D Approach Guardrail Ends:	(1) Meets Standards	
71 Waterway Adequacy:	(8) Equal Desirable	
72 Approach Alignment:	(8) Equal Desirable Crit	
113 Scour Critical:	(8) Stable above footing	
Recommended Scour Critical:	(8) Stable above footing	

CLEARANCES		
10 Vert. Clearance:		99.999 ft
53 Min. Vert. Clearance Over:		99.999 ft
54A Vert. Under Reference:		(N) Feature not hwy or RR
54B Min. Vert. Underclearance:		0.000 ft
55A Lateral Under Reference:		(N) Feature not hwy or RR
55B Min. Lat. Underclearance R:		0.000 ft
56 Min. Lat. Underclearance L:		0.000 ft

LOAD RATINGS		
63 Operating Type:	(1) Load Factor (LF)	
64 Operating Rating:	75.0 tons	
65 Inventory Type:	(1) Load Factor (LF)	
66 Inventory Rating:	45.0 tons	
Truck Capacity Type I:	tons	
Truck Capacity Type II:	tons	
Truck Capacity Type III:	tons	
Truck Capacity Type IV:	tons	

POSTINGS		
41 Posting Status:		(A) Open, No Restriction
Signs Posted Cardinal:		No
Signs Posted Non-Cardinal:		No
Field Postings Gross:		tons
Field Postings Type I:		tons
Field Postings Type II:		tons
Field Postings Type III:		tons
Field Postings Type IV:		tons

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12: Re Concrete Deck

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	42,330	42,330	100%	0	0%	0	0%	0	0%

A reinforced concrete deck serves as the wearing surface of the bridge. Stay-in-place forms prevent inspection of the deck underside. The top of the deck appears to be in perfect condition.

107: Steel Opn Girder/Beam

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	4,130	4,130	100%	0	0%	0	0%	0	0%

5 weathering steel I-beams serve as the superstructure of the bridge. They are 120"D x 20"W. No defects were observed during our inspection.

515: Steel Protective Coating

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	31,470.6	31,470.6	100%	0	0%	0	0%	0	0%

The weathered coating is uneven around the bolts at the intermediate diaphragms in span 3 (see photos). Otherwise it appears to be in good condition.

Total QTY - 103,250 SF; QTY 1 - 103,250 SF

210: Re Conc Pier Wall

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	47	47	100%	0	0%	0	0%	0	0%

Each pier consists of a reinforced concrete pier wall topped with a pier cap. The walls appear to be in good condition.

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215: Re Conc Abutment

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	102	102	100%	0	0%	0	0%	0	0%

There are reinforced concrete abutments and wingwalls at both ends of the bridge. They appear to be in good condition.

234: Re Conc Pier Cap

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	102	102	100%	0	0%	0	0%	0	0%

There are reinforced concrete pier caps at each pier. They appear to be in good condition.

300: Strip Seal Exp Joint

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	102	0	0%	0	0%	0	0%	102	100%

Both joints have FL rubber detachment and are filled with debris.

310: Elastomeric Bearing

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
EACH	20	20	100%	0	0%	0	0%	0	0%

The bearings appear to be in good condition.

331: Re Conc Bridge Railing

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	1,660	1,260	76%	398	24%	2	0%	0	0%

The bridge has a Type 3 reinforced concrete barrier on both sides. There are 232 FH vertical cracks in the east barrier, 166 in the west. There is a large spall (2' diameter) with exposed wood formwork in the west barrier (see photos).

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852: Drains

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

50% of the drains have minor debris but remain open.

859: Vegetation

Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

Pier 2 is covered in vines. Vegetation around the bridge impedes inspection.

STRUCTURE NOTES

-12.4

INSPECTION NOTES

Inspection performed by B. Reid and J. Miller of HDR, Inc. 07/15/2015.

Additional Inspection Notes:

Span 1 – 218'; Span 2 – 390'; Span 3 – 218'; Structure – 830'

There are no obstruction markers present.

Span 2 could not be thoroughly inspected on foot due to the size of the river and the height of the bridge.

WORK

Action: 1056 - Misc-Remove Vegetation

Vegetation should be cleared from below and on the structure.